

Stream Construction Specifications

**For The Procurement
Of the Services Of A**

**Large 4WD Tractor and Dirt Pan
Small 4WD Tractor and Dirt Pan
Low Ground Pressure Dozer
Hydraulic Excavator
Articulated Dump Truck
Construction Supervisor
Laborer
Service Allowance
Materials Allowance**

April 2019

Sponsor:

West Tennessee River Basin Authority

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Bid Information

This contract consists of procuring the services of a large excavator, a low ground pressure dozer, a large 4WD tractor with pull pan, small 4WD tractor with pull pan, articulated dump truck, construction supervisor, and laborers to be employed in stream restoration activities including installation and maintenance of erosion control practices in West Tennessee. The work shall be carried out in conformance with permits issued to the West Tennessee River Basin Authority (WTRBA) for construction of stream restoration projects. The point of contact for this project shall be Mr. David Blackwood at the offices of the West Tennessee River Basin Authority Offices in Humboldt, Tennessee, (731) 784-8173.

Estimated quantities are as follows:

Work Item Description	Estimated Quantity	Unit
Hydraulic Excavator with Operator Hourly Rate	1500	hours
Low Ground Pressure Dozer and Operator Hourly Rate	1000	hours
Large 4WD Tractor with 18CY Dirt Pan and Operator Hourly Rate	800	hours
4WD Tractor with 10CY Dirt Pan and Operator Hourly Rate	800	hours
Articulated Dump Truck and Operator Hourly Rate	600	hours
Construction Supervisor Hourly Rate	1000	hours
Laborer Hourly Rate	1000	hours
Service Allowance	\$ 100,000.00	dollars
Materials Allowance	\$ 100,000.00	dollars

Copies of plans, specifications and contract documents are on file in the office of the **West Tennessee River Basin Authority**, at 3628 East End Drive, Humboldt, Tennessee 38343, and are open for public inspection. A set of such documents may be obtained from the West Tennessee River Basin Authority.

General Specifications

1. Explanation

The Specifications are divided into General Specifications and Detail Specifications. The General Specifications pertain, for the most part, to the relations between the Contractor and the State. The Detail Specifications describe each class of construction work, define and classify materials involved in the work, and explain the manner in which each class of work shall be done and how it will be measured and paid for.

2. Definitions

Whenever the words herein defined or pronouns used in their stead occur in the Contract and Specifications, they shall have the meaning here given. The word "State" shall mean Department of General Services as related to bid and award and the **West Tennessee River Basin Authority** as related to work performance and payment. The word "Commissioner" shall mean either the Commissioner of General Services or the Executive Director of the West Tennessee River Basin Authority or their properly authorized agents acting severally within the scope of the particular duties entrusted to them as described under the above definition of "State". The word "Engineer" shall mean West Tennessee River Basin Authority or its authorized representative.

The word "Contractor" shall mean the person, partnership or corporation entering into a contract for the performance of work or the agent appointed to act for the Contractor in the performance of the work.

The words "Directed," "Required," "Ordered," "Instructed," "Considered Necessary," or words of like import, shall mean that the direction, requirement, order, instruction, etc., of the WTRBA Engineer is intended; similarly the words "Approved," "Acceptable," "Satisfactory," or words of like import, shall mean approved or acceptable or satisfactory to the WTRBA Engineer.

Whenever the figures are given in the Specifications after the word "Elevation" or where figures representing elevations are given, they shall mean distance in feet above the U. S. Geological Survey Sea Level Datum or a locally established job site datum, if so noted on the plans.

3. Examinations and Investigations

The offering of a bid by the Contractor for the work under this Contract shall constitute a good and sufficient declaration on the part of the Contractor that he has examined, to his complete

satisfaction, the site of the work and adjacent premises, and the various means of approach to the work, and has made all necessary investigations in order to inform himself thoroughly as to the character and magnitude of all work involved in the complete execution of the Contract, and also of the facilities for delivering and handling materials, and that he has familiarized himself with all local conditions and other circumstances that may be encountered in the performance of the work. The offering of the bid shall be a waiver on the part of the Contractor of all claims for extra compensation as a result of his failure to make such examinations and investigations.

5. Equipment

The Contractor shall employ equipment of such size and character that a rate of progress can be maintained that will insure the completion of the work within the time specified in the contract and that will insure a satisfactory quality of work. The approval of the WTRBA Engineer of the Contractor's equipment shall not relieve the Contractor of his obligation to maintain the required rate of progress, in the event the equipment proves to be inadequate.

The Contractor shall not sell or remove equipment or materials that have been installed and that may be necessary for the completion of the work without the written consent of the Engineer.

6. Direction of Work

Prior to the start of construction, the Contractor shall call a pre-construction conference, including his Project Superintendent and his Foreman, the WTRBA Engineer, and others as the WTRBA Engineer may direct. The purpose of this meeting is to review the requirements of the Contract, Permit and Construction Documents to assure complete understanding of the specific responsibilities of each participant and his relationship with the others involved.

The WTRBA Engineer shall have the right to direct the manner in which all work is to be conducted insofar as may be necessary to secure the proper progress and quality of the work, and all directions and instructions of the WTRBA Engineer, or any of his inspectors or other agents shall be carried out by the Contractor. In order to insure the proper completion of the Contract, the WTRBA Engineer may, if necessary, determine the order of precedence in which any part of the work shall be commenced and carried on.

The Contractor agrees that notwithstanding the general supervisory control that may be exercised by the Engineer and State over the work to be done under the terms of this contract and the specifications, that his responsibilities and liabilities are those of an independent Contractor.

8. Inspection of Work

All work and material furnished shall be subject at all times to a thorough and minute inspection by the WTRBA Engineer. The Contractor shall permit access at all times to every part of the work and to all points where materials to be used in the work are manufactured, procured or stored.

9. Determination of Quantities and Measurements

The WTRBA Engineer shall determine all quantities and amounts of work performed.

10. Changes and Alterations

The State reserves the right to make any alterations, eliminations or additions that it may deem necessary in the work to be done, or any part thereof, and to make any variations on the quantity of work to be done, provided that any such alterations, eliminations, and additions shall not materially alter the general character of work as a whole.

If such changes diminish the quantity of work to be done, they shall not constitute a claim for damages for loss of anticipated profits on the work already done or material already furnished or used in the work. The State shall make payment to the Contractor for such work or materials at the unit price stipulated in the Contract. If by reason of changes the amount of work is increased, such increase shall be paid for according to the quantities actually done, and at the unit price established for such work under the contract.

11. Defective Work and Materials

If the work should be damaged in any way, or if any defects not readily detected by inspection develop before the final acceptance of the whole work, unless hereinafter otherwise specified, the Contractor shall correct such damage or defect without additional compensation. If the Contractor shall fail to reconstruct any defective or damaged work after reasonable notice, the WTRBA Engineer may cause such work to be reconstructed and the expense thereof shall be deducted from the amount to be paid to the Contractor.

If upon any work that is defective or damaged, the imperfection, in the opinion of the Engineer, is not sufficiently important to require reconstruction, the State shall have the right to make such deductions as the WTRBA Engineer may determine to be just and reasonable, from the amounts due or to become due the Contractor instead of requiring the imperfect part to be reconstructed.

12. Time and Order of Completion

Determination as to whether the required rate of progress is being maintained may be made at any time after the work has started, by comparing the value at the contract price of the amount of work done, with the value at the Contract price of the amount of work necessary to have been accomplished during such period in order to have maintained the prescribed rate of progress. In determining progress; the work shall be assumed to have begun at the date of the Purchase Order, and proper consideration shall be given to any extensions of time that may have been granted. Any failure to maintain the required rate of progress, after taking into consideration extensions of time that have been granted, shall be a breach of contract, just as would be a failure to complete the entire work within the specified time.

Contract term is for fiscal and payment purposes only and does not alter stated time for completion.

Contract term may be extended for final inspection and fiscal reasons without comment, but extension of contract term to alter completion times must be requested in writing to the **West Tennessee River Basin Authority** and a copy of this request signed by the director and forwarded to the state contract administrator.

Assessment of damages shall be the sole responsibility of the engineer and the Director of the Authority.

13. Extension of Time

Delays due to causes beyond the control of the Contractor, other than those that, in the opinion of the WTRBA Engineer, reasonably would be expected to occur in connection with the performance of the work, may entitle the Contractor, to an extension of time for completing the work sufficient to compensate for such delay. No extension of time shall be granted, however, unless the Contractor shall, within fifteen (15) days from the beginning of the delay, notify the WTRBA Engineer in writing of such delay, and of the time of beginning and the cause of the

same. After work is resumed, the WTRBA Engineer will determine the extension of time, if any, that shall be allowed the Contractor, and his decision shall be binding and conclusive on both parties.

14. Hindrances and Delays

The Contractor shall bear all loss or damage for hindrances or delays, from any cause, during the progress of any part of the work under the Contract and also all loss or damage arising out of the nature of the work to be done, or from the action of the elements, or from any unforeseen conditions encountered in connection with the work, or from any other cause whatever. No charge other than that included in the Contract price for the work shall be made by the Contractor against the State for such loss or damage.

15. Payment Determinations

During the progress of the work, and about once a month, the WTRBA Engineer will make an estimate of the amount and value of the work done and materials incorporated into the work by the Contractor. The WTRBA Engineer may, at his discretion, defer a current estimate until the value of the work done and materials incorporated into the work since the preceding estimate is in excess of \$500.

As soon as practicable after a current estimate is made by the WTRBA Engineer, the State shall pay the Contractor 100 percent of the value, at the unit price or prices stipulated in the Contract, of the work done and the materials incorporated into the work since the preceding estimate.

16. Final Payment

As soon as practicable after the work covered by the Contract has been completed in a manner satisfactory to the WTRBA Engineer and the State, the WTRBA Engineer will prepare a final determination showing the total amount of work done under the Contract and value thereof and the amount due the Contractor under such final determination. Final payment will be made at that time by the State. All prior estimates and payments shall be superseded by and shall be subject to correction in the final determination.

17. Conduct of Work

The work to be performed under these Specifications consists for the most part of constructing stream restoration projects in West Tennessee. This contract consists of procuring the services (including skilled operators) of an excavator, a low ground pressure dozer, a large tractor with “pull” pan, a small tractor with “pull” pan, articulated dump truck, construction supervisor, and laborers to be employed in stream restoration activities including the installation and maintenance of erosion control measures. The work shall be carried out in conformance with permits issued to the West Tennessee River Basin Authority (WTRBA) for construction of stream restoration projects. It is desired that all work be carried on in such a manner as to interfere to as small a degree as possible with the adjacent wetlands. The Contractor shall be required to carry on work in a manner to accomplish the desired end. The Contractor assumes full liability for any damage to persons, land, crops or property caused by his failure to carry out the work as herein required.

18. Contractor's Representative and Workman

The Contractor shall designate to the WTRBA Engineer a representative in each construction force to receive and carry out the WTRBA Engineer's instructions and orders.

Detailed Specifications

1 --- Description of Work

The work to be performed under these Specifications consists for the most part of constructing stream restoration projects in West Tennessee. This contract consists of procuring the services (including skilled operators) of a Hydraulic Excavator, a Low Ground Pressure Dozer, a Large 4WD Tractor with Pull Pan, a Small 4WD Tractor with Pull Pan, Articulated Dump Truck, construction supervisor and laborers to be employed in stream restoration activities including installation and maintenance of erosion control measures. The work shall be carried out in conformance with permits issued to the West Tennessee River Basin Authority (WTRBA) for construction of stream restoration projects. Materials such as silt fence, rip rap, straw wattles, erosion control matting, etc. will be procured by the Contractor prior to initiation of construction activities. It is desired that all work be carried on in such a manner as to interfere to as small a degree as possible with adjacent wetlands and other natural resources. The Contractor shall be required to carry on work in a manner to accomplish the desired end. The Contractor assumes full liability for any damage to persons, land, crops or property caused by his failure to carry out the work as herein required.

2 --- Quality Control

The Contractor shall establish and maintain quality control for the work specified in this section to assure compliance with contract requirements and maintain records of his quality control for all construction. A copy of these records and tests, as well as the records of corrective action taken, shall be furnished to the WTRBA Engineer. A minimum of daily equipment logs for the billing period shall be required with each invoice. (Ex. of Daily Job Report-Page 16)

3 --- Right-of-Way

3.1 General

The lands, easements, and rights-of-way for work under the Contract will be provided without cost to the Contractor. However, the Contractor shall make his own arrangements with the appropriate owners or organizations for transporting his equipment across, over or under, highways, bridges, private property, and utility lines and shall provide at his own expense any additional rights-of-way or easements required to effect such crossings, including insurance requirements of owners.

3.2 Utility Lines in Right-of-Way

The Contractor shall make his own arrangements with the owners of utility lines if located within the right-of-way for re-routing or altering of power and communication lines as may be necessary to provide clearance for the construction of the work adjacent thereto. No separate payment, as such, will be made for the alternation of these utility lines and the costs in connection therewith will be considered as an incidental expense to the Contractor. The Contractor shall exercise special care in working in the vicinity of the utility lines to prevent damage thereto or injury to the Contractor's employees or others. Any damage to the utility lines or interruption of service occasioned by the Contractor's operations shall be repaired and the service restored promptly at his expense.

Special Specifications

All the work covered under this contract shall be performed as specified in the following standard specifications; unless ordered different by the WTRBA Engineer.

Payment for all work covered under this contract shall be made under nine (9) bid items: Hydraulic Excavator Hourly Rate, Large Tractor with "Pull Pan" Hourly Rate, Small Tractor with "Pull Pan" Hourly Rate, Low Ground Pressure Crawler Dozer Hourly Rate, Articulated Dump Truck Hourly Rate, Construction Supervisor Hourly Rate, Laborer Hourly Rate, Contracted Service Dollar Amount, and Materials Allowance Dollar Amount. Payment, at the contract unit price, for these items shall constitute full compensation for furnishing all equipment (including operators) and performing all labor for the performance of the work specified herein.

Large 4WD Tractor with Pull Pan

Shall be paid to the contractor as compensation for the actual number of hours spent actively completing the work specified herein.

Small 4WD Tractor with Pull Pan

Shall be paid to the contractor as compensation for the actual number of hours spent actively completing the work specified herein.

Hydraulic Excavator Hourly Rate

Shall be paid to the contractor as compensation for the actual number of hours spent actively completing the work specified herein.

Low Ground Pressure Dozer Hourly Rate

Shall be paid to the contractor as compensation for the actual number of hours spent actively completing the work specified herein.

Articulated Dump Truck Hourly Rate

Shall be paid to the contractor as compensation for the actual number of hours spent actively completing the work specified herein.

Construction Supervisor Hourly Rate

Shall be paid to the contractor as compensation for the actual number of hours spent actively completing the work specified herein.

Laborer Hourly Rate

Shall be paid to the contractor as compensation for the actual number of hours spent actively completing the work specified herein.

Contracted Service Allowance

Shall be paid to the Contractor for third-party service provided. The contractor will be compensated for actual costs of contracted third-party service plus a rate of 5% for administrative costs. Service may include labor, equipment, materials, and installation of a specialty item such as erosion control features or tree planting.

Materials Allowance

Shall be paid to Contractor for cost of materials purchased. Only materials and delivery costs will be eligible for payment under this item. The contractor will be compensated for actual costs of materials, delivered and onsite, plus a rate of 10% for administrative costs. Reimbursement will be made based on an invoice from a vendor, paid by the Contractor.

The Contractor shall commence work within 30 days of written Notice to Proceed, and shall continue to work at a reasonable rate of progress as determined by the WTRBA Engineer. The Contractor shall keep detailed records of hours worked, along with starting and stopping time, “downtime” for maintenance or weather and the nature of such “downtime”, and the progress made in relation to Stations and Grade Stakes at the end of each workday. Copies of these records shall be submitted along with requests for payment. Maintenance, fueling, repairs and lunch breaks are not considered normal production hours, and will not be paid as such.

Construction Specifications

A- Stream Construction

A-1 General

The purpose of this contract shall be to procure for the West Tennessee River Basin Authority (WTRBA), a division of the Tennessee Department of Environment and Conservation, the services of a Hydraulic Excavator, a Low Ground Pressure Dozer, a Large 4WD Tractor with Pull Pan, a Small 4WD Tractor with Pull Pan, Articulated Dump Truck, Construction Supervisor and Laborers to be employed in stream restoration activities including installation and maintenance of erosion control measures. A skilled operator must be provided for each piece of equipment. The work shall be carried out in conformance with permits issued to the West Tennessee River Basin Authority (WTRBA) for construction of stream restoration projects. It is desired that all work be carried on in such a manner as to interfere to as small a degree as possible with the adjacent wetlands and other natural resources. The Contractor shall be required to carry on work in a manner to accomplish the desired end. The Contractor assumes full liability for any damage to persons, land, crops or property caused by his failure to carry out the work as herein required. Said provider shall perform operations for a stipulated hourly rate.

A-2 Large 4 Wheel Drive Tractor with Pull Pan

- a. Large 4 Wheel Drive Tractor. Must be a minimum of 400 HP.
- b. Pull Pan shall have a minimum 18 Cubic Yard capacity
- c. The contractor shall provide a skilled operator
- d. The contractor shall provide mobilization of the equipment

A-3 Small 4 Wheel Drive Tractor with Pull Pan

- a. Small 4 Wheel Drive Tractor. Must be a minimum of 200 HP.
- b. Pull Pan shall have a minimum 10 Cubic Yard capacity
- c. The contractor shall provide a skilled operator
- d. The contractor shall provide mobilization of the equipment

A-4 Hydraulic Excavator Specifications

- a. Kobelco 210LC or John Deere 200 D LC, or equivalent
- b. The trackhoe bucket shall have a minimum of a 1-3/4 cubic yard bucket.
- c. The contractor shall provide a skilled operator
- d. The contractor shall provide mobilization of the equipment

A-5 Low Ground Pressure Dozer Specifications

- a. Caterpillar D5 LGP, or equivalent
- b. The Dozer shall have a 6-way blade.
- c. The contractor shall provide a skilled operator
- d. The contractor shall provide mobilization of the equipment

A-6 Articulated Dump Truck Specifications

- a. Hydrema H 912HM, or equivalent
- b. The contractor shall provide a skilled operator
- c. The contractor shall provide mobilization of the equipment

A-7 Maintenance/Repairs

- a. The contractor shall be responsible for all maintenance, repairs and servicing of the particular piece of equipment. The contractor shall maintain all necessary equipment. Maintenance, fueling, and repairs, are not considered normal production hours, and will not be paid as such. The contractor shall, during the term of the contract, keep the aforementioned amphibious excavator in good condition and fit for use on this project.

A-8 Rental with Necessary Personnel

- a. It shall be understood that the contractor, by offering a unit-price for bid each item, *“Hydraulic Excavator Hourly Rate”*, *“Low Ground Pressure Dozer Hourly Rate”*, *“Large 4 Wheel Drive Tractor with Pull Pan”* and *“Large 4 Wheel Drive Tractor with Pull Pan”* shall be obligated to provide all equipment, support personnel, mobilization to and from sites, and any and all expertise as needed, during the course of the contract, to perform the contract work, as described previously herein.

A-9 Construction Supervisor

The contractor shall provide a construction supervisor as necessary to oversee construction activities and manage operations at each project site. The supervisor shall be the point of contact for decisions and coordination in the event that WTRBA staff is not on-site. Supervisor must have construction management and construction survey experience.

A-10 Laborers

The contractor shall provide laborers as necessary appropriate to install silt fence and erosion control structures (including erosion control matting, straw wattles, and filter fabric), perform seeding/mulching, and to clear of brush in accordance with project plans.

A-11 Work Area

The equipment with operator and all necessary support personnel may be required to work anywhere west of the Tennessee River, within the state of Tennessee.

A-12 Vendor Liability

The vendor/contractor shall assume all responsibility for the operation and risk associated with the execution of the project, as outlined in the specifications, or as directed by the WTRBA and/or its duly appointed agent(s).

A-13 Method of Payment

Payment shall be made at the contract unit prices. Such payments will constitute full compensation for all labor, materials, equipment, including, operation, maintenance, fuel costs, all personnel costs, including per diem, mobilization, and all miscellaneous, and incidental costs necessary for the completion of the work specified. Contractor shall submit for payment of completed hourly work at regular intervals; no more frequent than bi-weekly and no longer than forty five (45) days.

A-14 Working Conditions

The WTRBA specifically advises potential contractors, that during the term of the contract, flood waters or excessive soil moisture depths in the working area may well prevent the Contractor from completing construction activities. **Downtime due to excessive water depths will not be paid for.**

A-15 Mobilization of Heavy Equipment

Cost associated with mobilization of heavy equipment shall be considered included within the hourly rate. Heavy equipment will not be requested for a project for duration of less than fifty (50) hours operation. In the event that this minimum is unmet, by written direction of the WTRBA, the Contractor shall invoice the WTRBA for fifty (50) hours operation of the specific equipment and note the time as "minimum use limit" on the submitted invoice. This minimum shall only be applied as necessary as and no more than once per project location. The Contractor may elect to waive this minimum use requirement at the time a request is submitted from the WTRBA for mobilization.

WTRBA STREAM CONSTRUCTION CONTRACT – DAILY JOB LOG

DATE:		WEATHER:	
PROJECT:		SUPERVISOR ONSITE:	

CONTRACT WORK ITEM:	QTY	START	END	TOTAL HOURS
TRACKHOE				
DOZER				
LARGE TRACTOR AND DIRTPAN				
TRACTOR AND DIRTPAN				
ARTICULATED DUMP TRUCK				
SUPERVISOR				
LABORER				

NOTES:	